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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,365

05/15/2006

Min-won Kim

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EXAMINER

MELLON, DAVID C

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

06/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,365	Applicant(s) KIM, MIN-WON	
	Examiner DAVID C. MELLON	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/29/2009 has been entered.

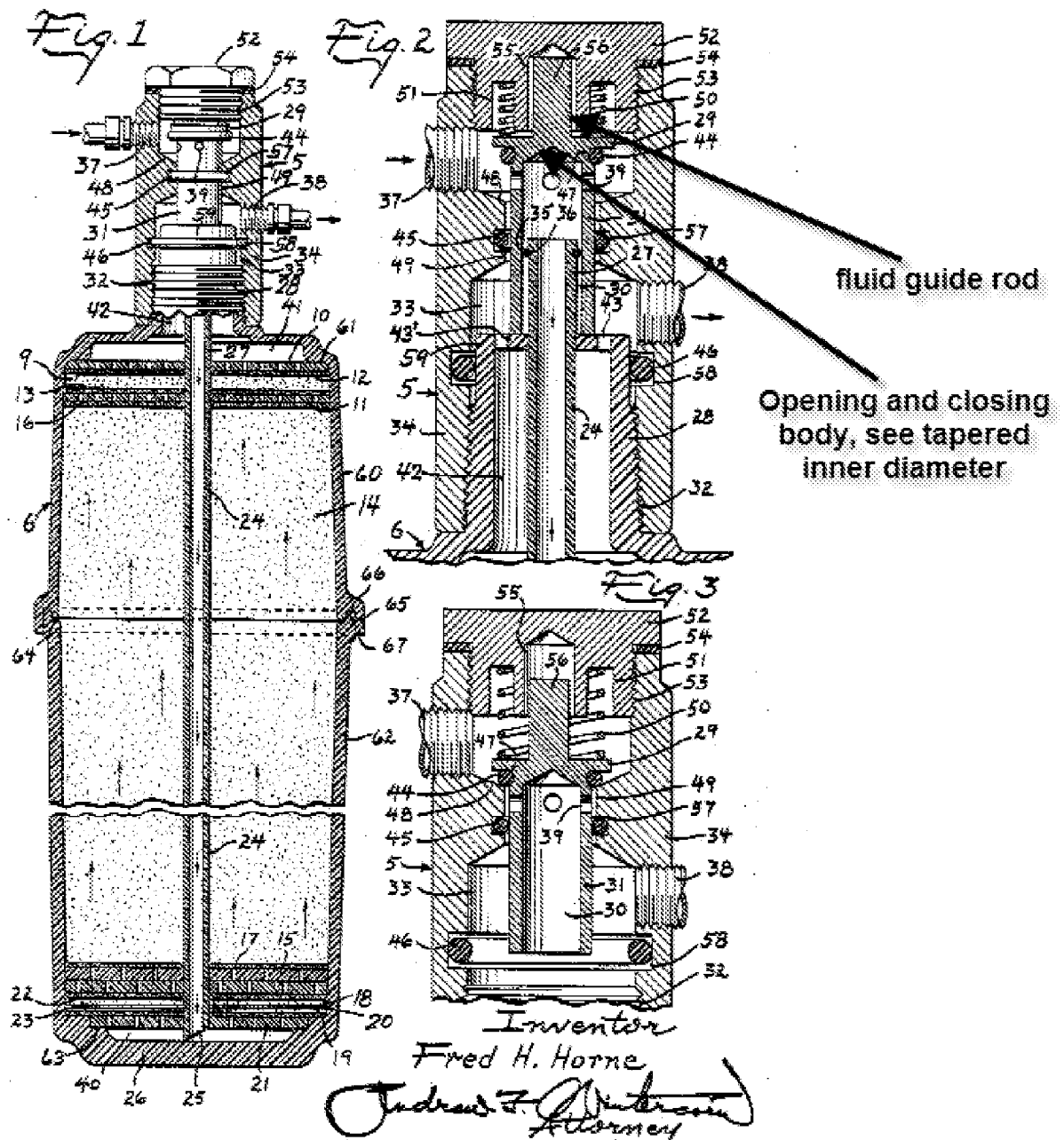
Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Horne (USP 3,319,791).**



Regarding claim 3, Horne discloses in figures 1-3 (see also annotated figures), a poppet valve and container combination (title) comprising:

a head (5) having a guide passage (passage between inlet 37 and conduit 24, see also internal space around the valve assembly) and an inlet port (37) and an outlet

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port (38), said guide passage suitable for guiding fluid into said head through said inlet port, said outlet port suitable for discharging purified fluid from said head;

a filter body (6, see also C1/L60-C2/L25 where clearly the container is intended as a filter by internal components discussed) threadedly locked to said head (threading 28 and 32 connects the components together), said filter body in fluid communication with said guide passage and said inlet port and said outlet port so as to receive fluid from said guide passage and said inlet port and to transfer purified fluid to said outlet port; and

a fluid flow interrupting means disposed in said guide passage (poppet valve component including pilot end 56, also 29, 44 and other parts), said fluid flow interrupting means having:

a fluid guide rod formed at one end thereof (56),

an opening and a closing body connected at one end thereof to said fluid guide rod (see annotated figure 2),

said opening and closing body having a gradually decreasing diameter (see tapered internal diameter part) with an O-ring fitted therearound adjacent one end thereof (o-ring 44) and an opening and closing projection formed adjacent an opposite end thereof (see aspect below o-ring),

an elastic spring cooperative with said guide passage for controllably opening and closing said guide passage by force of said elastic spring when said head and said filter body are coupled and uncoupled from each other (50, C2/L52-70),

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said filter body having at least one through hole defined at an upper end thereof so as to allow fluid from said guide passage and said inlet port to flow into said filter body (conduit 24),

said guide passage having a hollow cylindrical protuberance formed at one end thereof (55 - central bore), said hollow cylindrical protuberance having an inner diameter greater than an outer diameter of said fluid guide rod (this is clearly shown in the figure),

said guide passage having a gradually decreasing inner diameter at an opposite end thereof (see decreasing diameter of beveled valve seat 48), said fluid guide rod inserted through one end of said elastic spring (clearly fluid guide rod is through the spring), said elastic spring having another end fitted around said hollow cylindrical protuberance (spring 50 is in groove 51 around 55), said fluid guide rod suitable for guiding fluid therearound (fluid would be guided around rod 56), said elastic spring being supported by said hollow cylindrical protuberance (55 has groove 51 in a portion of it).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horne (USP 3,319,791) and further in view of Nam et al. (US 2003/0042191)..

Regarding claim 4, Horne discloses all of the claim limitations as set forth above. Horne is silent as to a mounting bracket system.

Nam et al. discloses a manifold for a replaceable fluid filter cartridge (Abstract) and in figure 1 shows a fixing unit (130) which attaches to circular plate (137) of the manifold and is then used to attach the device to a wall ([0043]).

Horne and Nam et al. are combinable because they are both concerned with the same field of endeavor, namely that of water filter devices.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the water filter apparatus of Horne to include a mounting bracket to hold the head or manifold aspect of a filter unit to a wall as taught by Nam et al. for the purpose of allowing for the filter device to be securely installed into a location for usage.

Response to Arguments

7. Applicant's arguments with respect to claims 3 and 4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Choi et al. (USP 7,387,725)
- Hansen (USP 2,092,116)

The above listed prior art sets forth exemplary valve components known to the prior art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID C. MELLON whose telephone number is (571)270-7074. The examiner can normally be reached on Monday through Thursday 7:00am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tony G Soohoo/
Primary Examiner, Art Unit 1797

/D. C. M./
Examiner, Art Unit 1797